RECEIVED
CENTRAL FAX CENTER
NOV 22 2006

In the Claims:

Please amend claims 1-5 as indicated below. This listing of claims replaces all prior versions.

1. (*Currently Amended*) Ballast circuit for operating a gas discharge lamp, comprising

a half-bridge DC-AC converter having a voltage controlled oscillator for alternating switching ~~the~~ two switches of said half-bridge, said oscillator having an input with a control voltage which determines ~~the~~ an operating frequency of said half-bridge;

a resonance circuit connected to said half-bridge for feeding the lamp; and

a feedback circuit connected at a first end to said resonance circuit for adjusting the operating frequency of said half-bridge,

characterized in that

the other end of said feedback circuit is connected to the input of said voltage controlled oscillator and designed such that during at least a substantial part of ~~the~~ a start-up period of the lamp an equilibrium exists wherein the half-bridge frequency is at least nearly equal to ~~the~~ a resonance frequency and ~~the~~ a half-bridge voltage is forced to operate at last nearly in phase with ~~the~~ a half-bridge current.

2. (*Currently Amended*) Ballast circuit according to claim 1, characterized in that the first end of the feedback circuit is connected to ~~the~~ a serial connection between the two switches of the half-bridge.

3. (*Currently Amended*) Ballast circuit according to claims 1 or 2, characterized in that said oscillator input is further connected to a current supply and a capacitor, wherein said equilibrium is determined by said currently supply loading said capacitor, and said feedback circuit at least partially unloading said capacitor each half-bridge switching cycle.

4. (*Currently Amended*) Ballast circuit according to claim 3 ~~any of the previous claims~~, characterized in that the ballast circuit is integrated in an IC.

5. (*Currently Amended*) Lamp driver for operating a gas discharge lamp ~~comprising the~~ using a ballast circuit, the lamp driver comprising: ~~according any of the previous claims.~~ a half-bridge DC-AC converter having a voltage controlled oscillator for alternating switching two switches of said half-bridge, said oscillator having an input with a control voltage which determines an operating frequency of said half-bridge;

a resonance circuit connected to said half-bridge for feeding the lamp; and

a feedback circuit connected at a first end to said resonance circuit for adjusting the operating frequency of said half-bridge,

characterized in that

the other end of said feedback circuit is connected to the input of said voltage controlled oscillator and designed such that during at least a substantial part of a start-up period of the lamp an equilibrium exists wherein the half-bridge frequency is at least nearly equal to a resonance frequency and a half-bridge voltage is forced to operate at last nearly in phase with a half-bridge current.

6. (*New*) The lamp driver according to claim 5, characterized in that the first end of the feedback circuit is connected to a serial connection between the two switches of the half-bridge.

7. (*New*) The lamp driver according to claim 5 or 6, characterized in that said oscillator input is further connected to a current supply and a capacitor, wherein said equilibrium is determined by said currently supply loading said capacitor, and said feedback circuit at least partially unloading said capacitor each half-bridge switching cycle.

8. (*New*) The lamp driver according to claim 7, characterized in that the ballast circuit is integrated in an IC.